



^{THE} Macdonald Farm Journal

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F A R M . S C H O O L . H O M E



Corner of Main and RR1

Moved by the same desire which prompted his forefathers to push back the frontier and tame the wilderness, today's farmer still retains a determination to be independent—to till his own acres—to impart to his sons and daughters a love for the land and to conduct a successful business—a business in which every Canadian has an interest.

Times have changed "down on the farm" however, and, although the farmer may have moments of nostalgia for "the good old days", he certainly wouldn't exchange today's farming methods for yesterday's backbreaking toil—when his job was truly a dawn-to-dusk struggle.

Today, his is not a simple "sow-and-reap" economy. He is an intelligent businessman. By radio he receives weather reports and knows how to interpret them. He is fully conversant with crop rotation, soil conservation, scientific stock feeding and breeding, local and world market conditions, and the efficient application of electricity to

make his work easier — his life more comfortable.

The tremendous expansion of rural electrification in recent years has enabled countless thousands of farmers to harness this clean, abundant supply of power to improve methods, increase production.

This same power has enabled the farm families to enjoy all the comforts and conveniences of urban dwellers—and in so doing has created large new markets for electrical products.

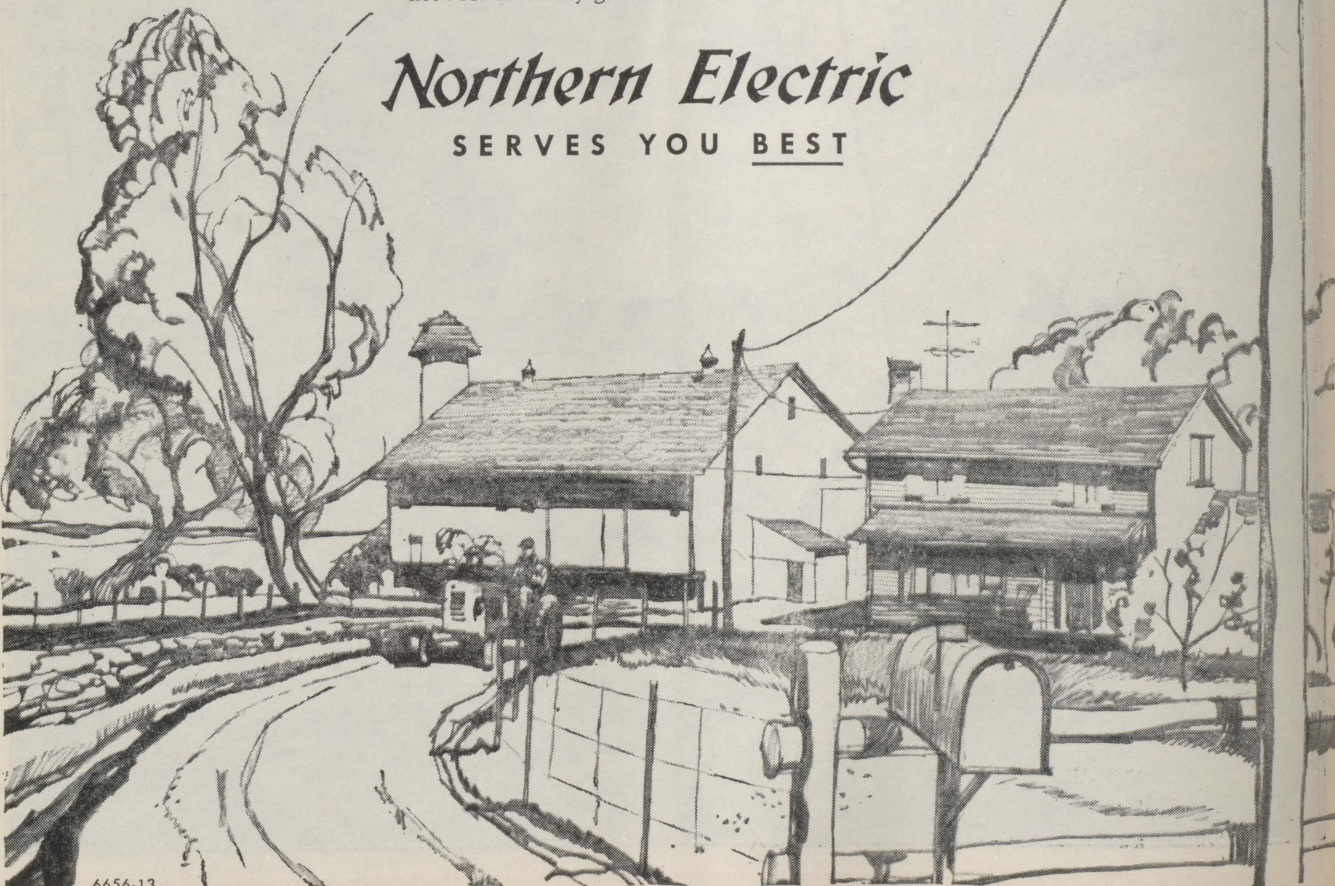
As manufacturers of power transmission wires and cables, distributors of power apparatus, overhead and underground equipment, wiring materials, electric refrigerators, ranges, washers, dryers, television sets and radios—and with warehouses right across the country—Northern Electric has contributed immeasurably to the expansion of rural electrification and the creation of new markets for Canadian products—new jobs for Canadian workmen.

A CAREER AT NORTHERN!

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Canada's Economic Prospects

The Royal Commission on Canada's Economic Prospects—the Gordon Commission—has spoken. It has reported in a slim hundred page preliminary report—far too small to do justice to either the problem or to the labours of the Commission and its staff. However, a final report will follow soon, and the Commission promises “a detailed examination... of the Canadian economy and a reasoned survey of its economic prospects.” Thirty-three special studies, including one on agriculture, will be published separately.

Assuming no global war and no serious depression, the Commission foresees a glowing future. The population of the country is projected to increase from 15.6 million to 26.6 million in the period from 1955 to 1980; gross national product is expected to increase from 26.8 to 76.1 billion dollars over the same period. These almost staggering prospects describe the rapid development of a country rich in resources and particularly fortunate in the quality of its population.

This summary report attempts no precise measure of the impact of the population and national income changes on the demand for farm products. (The final Commission report will surely correct this deficiency). However, on the basis of generalizations regarding domestic and export demand, the report states that up to 1965 little intensification of land-use and no new land will be required. It pictures the types of changes which have been going on in recent years as continuing. This is a way of stating that we presently have “too much agriculture.” Beyond 1965, the Commission suggests that demand will catch up with or surpass output and “begin to have decided impact on the pattern of agricultural output and on the structural organization of farming.” It is expected that we shall have a more intensive agriculture beyond 1965. These trends are reflected particularly in a projected 16 per cent increase in size of farms, a decline of 13 per cent in numbers of farms, and a comparable decline in the farm labour force. While considerable intensification will be needed one might express surprise that the rapid industrialization of the country and its achieving considerable economic maturity would have as little effect on the agriculture of the nation as is suggested in this report.

In the area of farm policy, the Commission favours more and easier mortgage and intermediate term credit. It is neutral or slightly unfavourable to provincial marketing boards. It stresses the dangers of high price supports and proposes supports should be used only “to mitigate distress due to economic fluctuations.” It recommends against price supports based on any formula and suggests a full-time board in contrast to the present federal arrangement. The Commission's view on both provincial marketing boards and on price supports will be a disappointment to most farm groups.

The Commission shows wisdom in suggesting a land-use study for Eastern Canada, where over very large areas farm incomes have been extremely low. It is thought that out of such a study would come proposals for consolidating small farm units and encouraging agriculture—forestry undertakings. (It is interesting that the federal government has already initiated such an inquiry and will seek the cooperation of the provinces.)

The Commission recommendation against any action on the South Saskatchewan River project in the near future must have amazed Prairie farmers. This joint irrigation and power scheme would provide water for some half a million acres in a large problem area in West Central Saskatchewan. It would also add greatly to the stability of the region. Further, even if planning on the development commenced to-day the products of irrigation agriculture would scarcely be on the market by 1965, when according to the Commission they could be absorbed without the slightest difficulty. The Royal Commission stated that the tasks of the Prairie Farm Rehabilitation Administration in water conservation and improved farming are “largely completed.” Actually they have just nicely begun.

Perhaps the most controversial recommendation of the Commission relates to wheat marketing. The report suggests minimum marketing quotas be established for every farmer prior to seeding. What advantage this administratively difficult and cumbersome scheme would have is difficult to see. It would reduce the flexibility of Wheat Board operations. Certainly it would serve no purpose which could not be met with a very modest extension of credit on farm stored grain. Finally, it is based on an over-serious view of wheat surpluses.

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How the Morgan Arboretum May Serve Us All

by W. H. Brittain

Thousands of the students and visitors who have been at Macdonald College think they know the "Morgan's Arboretum." In the fall and spring it is a favorite walking place for students and for hundreds of other nearby residents; in the late winter it's the scene of sugaring-off parties and in the summer it welcomes hikers. But only a comparatively few of the thousands of visitors to "Morgan's Bush" really know just how important a role the "Arboretum" is beginning to play in Canada's rural economy.



WHAT is the Morgan Arboretum? What is its purpose? How is this purpose being carried out?

An arboretum, technically, is a botanical garden of trees, usually arranged in some regular way. While the Morgan Arboretum conforms to this in part, it is actually something more, for, within its boundaries, are over 300 acres of natural woodland containing a large proportion of mature trees together with an almost equal area in brush or immature growth. In the woods will be found

most of the tree species characteristic of the region but with a preponderance of beech. Red and white maple, red oak, basswood, ash and other hardwoods are present in quantity. One area includes a high proportion of hemlock. Some scattered white pines occur in other areas. In land that has been cleared or heavily cut over, there is a great deal of grey birch and aspen poplar. A sugar bush contains sufficient sugar maples to enable us to hang 4000 sap buckets each season.

About 100 acres formerly under cultivation and used for pasture have been cleared and mass-planted in trees valuable for timber or pulpwood — spruce, pines, tamarack, cedar, ash, black walnut, oaks, hickory, maple, black cherry, etc. And, in addition, though this is apart from our main purpose, there is a small nut orchard. A small nursery supplies trees grown from seed or from small seedlings, which are planted out as they attain a suitable size.

The more formal part of the Arboretum consists of groups or individual specimens representative of practically all the native trees of Canada including western as well as eastern forms. Where there is evidence that foreign species are of value in this area, either as pulp, timber, or for ornamental purposes, we have added them to our collection and have arranged them as nearly as possible according to their natural groups. For example, one field is devoted solely to maples; one to spruce; one to pines; one to firs and hemlocks. There is also a group of mixed hardwood representing the different species of hickories, walnuts, oaks and many miscellaneous species and varieties. There is still another in which we have collected all available trees with attractive blossoms that are likely to thrive in our climate.

This collection of trees enables interested students to observe, within a small compass, all the trees of any commercial importance that will survive in this area. Here they can conveniently study their general characteristics, growth habits, hardiness and adaptability. It should be emphasized that this part of the project, while important in itself, is an adjunct to our main purpose which is the proper management of our natural woods to ensure their continuous maximum yield.

The whole area now known as the Morgan Arboretum was devoted to its present purpose as far back as 1946, but the work of development and improvement was only undertaken in earnest in 1950. As now operated the woods and the adjoining plantings constitute a study centre for the problems associated with the care of farm woodlots. Taken together, they form a great out-of-door laboratory where students may study under actual conditions the facts essential to a practical understanding of the subject.

The project was instituted in response to a growing demand in this field, which, in turn, grew out of a realization of the fact that privately owned woodlots are of great potential importance to the wood producing industries, as well as constituting an important and, in many cases, the main sources of cash income to thousands of farmers in Eastern Canada. The idea of trees as a crop which, like other crops, require proper treatment if they are to be a source of continued income to the owner is a relatively new idea. It is this idea that the Arboretum was established to promote. All the activities form the background and framework for an educational program.

The methods employed in carrying out this program constitute the answer to the third question. Woodlot management is now a regular part of the curriculum of Macdonald College. For all the students enrolled in the Diploma Course in Agriculture it is a compulsory subject. It is also an elective subject for Degree students in all options of the course in agriculture and a required course for those electing landscape horticulture.

Courses in woodlot management are designed to impress the student with the undeveloped possibilities that exist in farm woodlots. The courses offer the student the necessary training in the methods of exploiting the possibilities, by

- protecting the woods from the harmful effects of grazing, wasteful cutting practices, fire and other agencies;
- improvement cuttings in young stands, to raise the value in productivity of a future crop, while simultaneously producing material which can be used to supply home and community needs.

In addition, the methods employed in marking and selective cutting in mature woods are demonstrated, in an effort to encourage the placing of all woodlands in a continuously productive condition.

However, this is not all. Formal courses to regularly registered university students are but a single phase of the educational program. This includes lectures, short courses, articles, pamphlets, and other activities, directed as promotion of a greater public appreciation of the needs and methods of woodlot conservation.

Though this effort is indeed a modest one in relation to the needs of the case, the resources of the University alone were inadequate to carry out the program which we have outlined.

Fortunately, these resources have been supplemented through an organization known as The Morgan Arboretum and Woodland Development Association. This is a body set up especially for the purpose of assisting the University in financing a program designed to "encourage all phases of forest research and to stimulate public education and interest in forestry matters; to bring about through methods of demonstration and local instruction a wider knowledge of how farm woodlots may be properly developed". The Association is supported by generous grants from a number of leading pulp and paper companies, and by many private individuals interested in the conservation of one of our greatest natural resources.

For further information regarding this or any of the other matters discussed, there is available for the asking a handsome booklet dealing with the Arboretum and all phases of its work. Interested visitors are always welcome to the Arboretum, and, when necessary, personally conducted tours may be arranged. Furthermore, written questions regarding the care of woodlands directed to the Department of Woodlot Management will be gladly answered.

What's in Store for the Family Farm?

Canadian agriculture is in the throes of a tremendous revolution to-day. What is in store for this huge industry? Will it be the same 25 years from now? Will the family farm survive? Dr. W. E. Haviland of the Economics staff analyses the situation.

OUR FARMING industry will progress only as an integral part of Canada's economic advance. This means gearing farming to long-run market trends. If this is done the forward march of technology will be vigorously influential.

The first market trend to which our agriculture is adjusting is the declining importance of exports relative to the domestic market. The only major exception is wheat. European agriculture has now been rehabilitated. The demand for Canadian farm goods will increasingly be determined domestically. The three main determinants of the shape of domestic demand are

- the rate of expansion of the population;
- the rate of growth of per capita income;
- the effect of rising incomes on expenditure patterns.

There are important substitution effects between items of food as income rises, but the total quantity of food consumed per person is conspicuously stable. At the same time, there is a bewildering variety of other goods and services competing for the consumer's dollar.

Another trend in which agriculture is participating is increasing efficiency. Although far from uniform in different farming lines, progress in general has been more rapid than the rate of increase in Canada's population.

Larger Farms, Fewer Farmers

The consequences of these two trends are that fewer farmers are needed to feed the nation. Although domestic demand has remained strong, the retreat from exports and the increased output have subjected Canadian farmers to a painful price-cost squeeze. The process of mechanization in recent years has been inducing a decline of about 14,000 per year in the number of farms through consolidation of some farms and the abandonment of others. (British Columbia is the only region that probably will run contrary to the direction of this trend within the next few decades.)

In Eastern Canada there may possibly be some new land settled, but the rate at which land goes out of farming will continue to exceed the rate of settling new land. And the increase in size of farms will continue in the East. In the Prairies, there will likely be a few million acres of new land cultivated in the next few decades. But because the farms there are rapidly increasing in size, through consolidation, the number of prairie farms will also decline. The net effect of these regional adjustments will likely be a small percentage increase of the amount of farm land in Canada.

The labour force in farming cannot long continue to decline at its recent rapid rate. From June 1951 to June 1956 the farm labour force fell from 997,000 to 804,000

with the sharpest decline being in numbers of unpaid family workers. Nevertheless, mechanization will continue to have a labour-saving bias. This displaced man-power is not needed in farming in order to feed the nation, but it is needed urgently in other industries that are rapidly expanding. The output per worker remaining in agriculture has risen since 1951 by about 6% per annum. The upward trend in output per worker will continue as farmers work with more capital and more livestock.

Another market trend of general significance is the keen demand of consumers for more services attached to their food purchases. This means that the marketing margin between the farm and retail price can be expected to widen.

How about the structural adjustments that are under way due to the changing pattern of demand for farm products?

The most obvious swing is away from cereals and other starchy foods, like potatoes, towards livestock products (poultry, beef, pork, and cheese) and also towards citrus fruits. As their incomes rise, Canadians eat more meat, especially lean meat. This means that our livestock production is increasingly geared to the domestic market. In spite of the increased capacity of farms (due, for example, to the replacement of horses by tractors) it is possible that Canada may even become a net importer of beef. Whether this materializes or not will depend on our tariff policy and on the rate of technological progress in grassland farming, in the breeding and nutrition of beef cattle, and in mechanical feeding and handling.

The required expansion in hog and poultry production should come relatively easily because these animals are mainly grain-fed and the output of grain can be increased readily in the Prairies. Also, hog and poultry enterprises lend themselves to intensification and large-scale operation.

Providing adequate pasture for the increasing inventory of beef animals needed may be more difficult. This places increasing economic incentive on raising beef cattle on consolidated farms in Eastern Canada—that is if the feed grain freight subsidy is retained.

As far as dairying is concerned, the past decade has been one of readjustment to market developments, such as the introduction of margarine. The decline in the per capita consumption of butter will probably continue at a more gradual pace, but if the sale of coloured margarine is permitted in Canada and if the sale of margarine in Quebec becomes legal, the non-fluid branch of the dairy industry will be in for another period of adjustment.

FARM FORUM

News and Views

by L. G. Young

January of 1957 introduced to the forums a series of three discussions on parity. The series was a change from previous topics as all three broadcasts dealt with different aspects of the same subject. The usual procedure is to have each broadcast deal with a different subject altogether.

The first week the forums reviewed "WHAT is Parity Income for Agriculture?" Three hundred and forty families attended the meetings and of these 299 said that the farmer's income was below a fair relationship with that of other occupations. Ways and means of arriving at their conclusions were many and varied. Fourteen forums stated that the price of farm supplies was rising and the price of farm produce falling, so it was obvious that their net income was decreasing although wages of industrial workers continued to rise. Some compared the length of time worked, the standard of living, the luxuries, and the available social security benefits of the farmer and the urban dweller. Seven asked why so many farms were being abandoned if there was a fair relationship between income of farmers and people in other occupations. Following is the argument used by the East Clifton Forum in Compton. "It was decided that when such a big percentage of farmers in our district have left their farms and gone to shops and factories there must be a better living elsewhere than on the farm." To this Sutton Junction in Brome added: "We could all say that prices for what we sell have not gone up, but for some things have actually gone down, while for what we have to buy the prices have continued to go up. None of our members could entertain the thought of buying a new car and yet the highways are crowded with new cars so that means others must be able to afford them. None of us is able to buy all the machinery that we'd like to have and should have if ever farmers are to put in as few hours as those in other occupations." Frost Village in Shefford clinched their decision with, "Fewer new cars and televisions seen on the farm. Many farmers stay on the farm, but work in the town or cities. Farmers cannot afford to pay wages for labour in comparison to industries."

"HOW CAN Parity Income for Agriculture be achieved?", was the second discussion of the series. Extremely cold weather kept attendance down, but those forums which did meet offered a few suggestions. The most popular of these are included in the answer of Jerusalem and Bethany in Argenteuil. "Secure parity income for farmers by controlled production, deficiency payments, price supports, and tariffs." Other methods mentioned were forward pricing, an improved marketing

program, and a two price system. Some forums thought that achieving parity was up to the farmer and must start at the farm. They suggest that the farmer support co-operatives, keep accounts, and improve the quality of his produce.

Parity of income for agriculture would be difficult to attain, according to some forums. As Mount Loyal in Montcalm said, "Controls of production would be alright for grain and land crops but wouldn't work for dairying or hog raising as it takes too long to get a start in them. We don't see how a parity for agriculture can be achieved when there is such a difference in the size of farms. Some are equipped to produce a lot, whereas small farms can't produce as much as the large ones. Unless all are on an equal basis as to size and quality, no parity can be achieved as we see it."

The final topic of the series considered whether or not parity income is the most important problem in agriculture. Almost three quarters of the replies indicated that forum members thought it the most important but a quarter of the forums considered other problems to be more urgent.

"We think that parity income is the most important problem. Give us a little profit and we can get by. The other important items are education, modern conveniences, good roads and recreation," replied Lachute Road in Argenteuil. Trout River in Huntingdon believed parity to be one of the most important problems, but added that there were others, such as surpluses. They thought parity was very complex and made up of many problems. They suggest that if these other problems are solved and parity is achieved, the farmer would be able to solve his own lesser problems of security and education.

Shawville West in Pontiac did not think parity to be most important. For them problems of urgent importance are security, recreation, unemployment insurance, medical services, and crop insurance to protect them from failures due to drought, disease, insects and other natural causes.

The problems of urgent importance as indicated by the findings are credit, security, education, and recreation. Over one third of the forums thought that farm credit must be improved. Next came security in the form of accident insurance, old age security, health insurance, crop and livestock insurance and unemployment insurance. Besides these already mentioned, some 24 other problems were cited by 6 or fewer forums.

Forum Whisperings:

Mrs. Anderson represented the Forums at the CFA and NFRF meetings in Winnipeg and presented them with the forums' views on the topics and on conservation. The resolution of forum topics stated that the forums seemed to be dissatisfied with the present ones, and asked that more non-farm topics and current affairs topics be used next year.

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Top Oils and What They Do

by J. H. Cooper

THERE ARE many materials and devices on the market which are advertised to improve the power and efficiency of the engine found in today's tractors and automobiles. The farmer who uses these products is sometimes at a loss to know just where and when to use them and if they will do the job as advertised.

Amongst this group may be included those products which are known as "top oils." Top oils, which are the products of reputable firms, will correct or reduce the effects of deficiencies of certain lubrication systems.

The name "top oils" implies that this oil is used to give extra lubrication to the top parts of the cylinder where adequate lubrication is difficult to achieve under adverse operating conditions. When a cold engine is started up, the oil in the crankcase is thick and it will not flow freely until it is warmed up. It is during this "warming-up" period with inadequate flow of oil to the top of the cylinder that most wear takes place between cylinder walls and piston rings. Top oils, added to the gasoline in the fuel tank in the recommended amounts, will reduce the wear at the top of the cylinder as they are mixed with the fuel when it is admitted to the cylinder and will stick to the cylinder wall to provide a lubricating film thick enough to prevent metal-to-metal contact between cylinder and piston rings. The use of "top oils" is definitely recommended with frequent starts and under cold weather conditions. Their use is also advantageous under normal operating conditions.

When gasoline is heated the volatile constituents are first evaporated, and there are left certain semi-solids which are commonly called "gums" or "varnish." Certain gasolines may have high "gum" content and they will tend to deposit these gums in the inside of the engine where they will seriously interfere with the proper functioning of engine parts. For example, if "gum" is deposited between the valve stem and its guide, this thick, varnish-like material will delay or slow up valve action so that a rough-running engine results. In severe cases it may cause burning or complete failure of the valves themselves. Gum deposits in the piston rings may be equally harmful. These deposits interfere with the movement of the rings in the piston ring grooves and will permit "blow-by" or leakage of gasses past the piston.

Gum solvents which are present in "top oils" dissolve these harmful gums as they are being formed and allow free and proper functioning of all engine parts. In certain engines where "sticking" valves may be a particular difficulty, it may be necessary to repeat or continue with the use of them.

Gum formation may be traced also to the use of a

poor quality or improper type of lubricating oil, in which case the gum solvents in the "top oils" will also take care of these harmful deposits. Probably a better solution would be to change the lubricating oil to that of a recommended type which is advised for use in these circumstances.

The addition of finely-divided graphite to "top oils" is said to reduce the friction between the moving parts in the engine by coating all moving surfaces with a thin plating of graphite which will prevent metal-to-metal contact and reduce wear. While this statement is probably true, it is still a fact that many lubrication engineers advise against its use as there are certain objectionable deposits which may follow when graphite is used. For new or overhauled engines, a "break-in" period at reduced power and speed is usually recommended while the various engine parts are being fitted or mated to each other. During this period there is some abrasion and removal of metal to ensure perfect fits. If graphited lubricants are used where the graphite is deposited on the sliding surfaces the parts cannot quickly reach their best fits and the break-in period may be unduly long. Then again there is the tendency for graphite to be deposited in oil lines and galleries where it may cause blockage of the oil to the bearing surfaces. Graphited lubricants have a limited recommended field of use—they may be used advantageously in engines which have been thoroughly "broken in" where the graphite coating may be effective in reducing friction and in sealing parts where gas leakage may take place.

Hard starting in cold weather is usually traced to the thick, viscous oil film which exists between cylinder wall and piston. Certain materials, called pour-point depressants, when added to lubricating oils have the ability to make the oil more fluid and less viscous at low temperatures. These pour-point depressants are usually added to the oils in the crankcase but some "top oils" do contain a certain proportion of these additives enabling easier engine starting at extremely low temperatures.

Lead deposits inside the combustion chamber may cause fouling of the spark plugs, poor seating and gas leakage past the valves and seats, etc. Tetraethyl of lead is added to gasoline to improve its performance as a motor fuel in today's high compression engines. When on wall of cylinders, tops of pistons, valves and spark plugs. This lead deposit formed on the insulated portion, or porcelain, of the spark plug will cause shorting, as lead is a good electrical conductor. Ethylene debromide is added to the gasoline to reduce the lead deposits. Other materials in some "top oils" further reduce the amount of lead deposits,

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DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Another Record Year for the Federee

THE 35th annual meeting of the Co-op Federee was held the last week of January in the Mount Royal hotel. The Federee is the central body of 402 affiliated local co-operatives in the province of Quebec. These locals, whose membership numbers 48,000 farmers, own and control the central organization of the Federee.

Figures given out at the meeting showed that 1956 was a banner year and many records were broken, including total sales and earnings. Total turnover or sales for fiscal year 1956 topped the \$81,000,000 mark, which is \$7 millions or 9½ per cent more than in fiscal 1955. Net earnings before patronage refunds and income tax were \$813,486, over \$100,000 more than the previous year, which had also been a record.

This increase in business came despite a drop in many prices. This means that the actual volume increase in business was even more than the dollar increase in total sales. Figures released showed that 65 per cent of the business transacted by the Federee was in farm products handled for the local co-op members, while the remaining 35 per cent consisted of supplies sold to the farmer.



This is the new executive committee of the Cooperative Federee. In the front row are Assistant General Manager Romeo Martin; Chairman of the Executive Adelard Bellemare; the new General Manager Raynauld Ferron; Director Joseph Laliberté. In the second row are Director Albert Gingras; vice-president Omer Deslauriers; and Treasurer Henri Beaugard. Others on the board not in the photo are Assistant General Manager J. A. Courteau and Leo Filion.

Principal reason for the increase in total sales was the increased business the local co-operatives gave to their central as well as to the subsidiaries, wholly owned by the Federee. (Dominion Elevator Ltd.; Legrade Inc. and La Co-opérative Canadienne du Bétail de Québec Ltd.)

Another significant item in the financial report lay in the net assets of the member co-operatives. During 1956 these assets increased \$398,145 from \$3,180,206 to \$3,578,351. The report shows that during the last four years, the net assets have increased at an average of \$400,000 a year.

Each year the Federee has many changes to report to the delegates attending the annual meeting. This year it was announced that the Federee has purchased the Abattoir Co-opératif Avicole des Bois-Francs at Victoriaville; that a start has been made on the building of a meat processing and storage plant in Montreal. It was stated

• The largest and most effective co-operative organization wholly owned and controlled by the farmers of the Province of Quebec . . .

LA COOPERATIVE FEDEREE DE QUEBEC

IS THE BEST MEDIUM

TO SELL FARM PRODUCTS

AND BUY FARM SUPPLIES

that these additional facilities are part of the Co-op Federee's program to increase its participation in the orderly marketing of farm products.

With the exception of livestock feeds, the cost on the farm of merchandise, services and labor was steady or higher. On the whole, farm revenues did not improve. However Mr. Bois felt that better days for Quebec farmers appear to be in the offing—possibly in 1957.

The most efficient means at the disposal of Quebec farmers to reduce the spread between the prices paid by consumers and those they receive is to do business with the Co-op, Senator Bois stated. Farmers, he said, must be careful to produce what the market requires, what the consumer desires, inasmuch as their farms and labour, etc. will allow.

Improving the farm economy will depend to a large extent on the farmers themselves. Today, he said, the farmer needs more information and better knowledge, if he is to play a part in improving this economy.

Federee Elects New Manager

The startling news coming out of the Co-op Federee annual meeting this year was the announced resignation of Senator Henri Bois, general manager of the Co-op since 1943, who has guided the Co-op through its most spectacular period of growth. Total sales of the Co-op Federee, since he first became associated with it as assistant general manager in 1938, have jumped from \$11,700,000 to the record level of \$81,200,000 in 1956. Senator Bois will continue to be associated with the Co-op as honorary president of the executive committee.

Raynald Ferron, formerly treasurer of the Co-op, was named as the new general manager. He has been associated with the Co-op since 1948, when he was appointed treasurer, after being connected with the Quebec Department of Agriculture for some years. Romeo Martin and J. A. Courteau were both named as assistant general managers. Mr. Martin is also secretary of the Co-op and Mr. Courteau is in charge of the packinghouse division of the Co-op Federee.

At the annual banquet this year there were a number of speakers instead of the usual single. They all paid tribute to the dedicated manner in which Senator Bois has served the agricultural population of the province of Quebec. Some of the speakers paying tribute to Mr. Bois included: Dr. S. J. Chagnon, assistant deputy minister of agriculture at Ottawa; Dr. H. H. Hannam, general manager of the Canadian Federation of Agriculture; Mr. J. B. Lemoine, president of the Union Catholique des Cultivateurs and Dr. Gustave Toupin, president of the National Salon d'Agriculture.

FARM FORUM...

(continued from page 5)

The resolution to the CFA concerning land use and conservation asked for more assistance in care of woodlots and long term credit to avoid the slashing and improper cutting of woodlots.

Publicity came in for some discussion as Ross Oswald of the publicity committee presented his report. Finally, the directors agreed to send an individual newsletter to each member as an experiment. Four issues will be tried and it is hoped that some expression of its usefulness can be determined at the annual meeting in the spring. In the meantime the committee will continue exploring other ways of improving publicity.

Preliminary planning was completed for another provincial topic to deal with cooperatives, and a brief report of the youth program committee outlined some of the developments in that field as well as some of the problems. The remainder of the day was occupied with program for the semi-annual meeting and with routine business. A report of this meeting will be in the next Journal.

Very few forums reported any special projects during January. The exception was Bishopton which has established a "disaster fund" of approximately \$500. A number of district committees have arranged for representatives to attend the semi-annual convention.

TOP OILS...

(continued from page 5)

keeping a cleaner combustion chamber with less fouling of spark plugs.

There is no conclusive evidence to show that there is any material which is effective in dissolving carbon which is formed in the combustion chamber. The "gum" solvents in "top oils" will dissolve gums which may be binding or holding so called "soft carbon" in the cylinder thereby reducing the tendency of an engine to "knock" under heavy load. The only effective way to remove carbon is to open up the engine and to scrape the carbon from these surfaces. One other novel way is to direct rice hulls in a rapidly moving air stream through the spark plug hole where the rice hulls act in a form similar to sand blasting.

Top oils may be applied as mentioned above. It is important that they be used as soon as possible after the trouble has been noticed. For example, continued operation of an engine with a sticking valve may result in complete burning of the valve and an expensive repair job. Top oils will free up sticking valves and piston rings but will not correct major mechanical troubles such as burnt valves, broken piston or rings, broken valve springs, etc.



The Shorthorn Club's executive committee: Fieldman Ab. Stoltz, secretary Don MacMillan, president Jean Godbout, vice-president C. N. Abbott, director C. C. Warner, honorary president N. G. Bennett.

"We're Ahead Of The Whitefaces and Catching Up To The Blacks"

A TRIBUTE to the memory of their honourary president, the late Senator Adelard Godbout, opened the eighteenth annual meeting of the Quebec Shorthorn Club, held in Sherbrooke on January 10th.

His son Jean, president of the Club, was in the chair for the business sessions, and the meeting was held in a spirit of optimism. 1956 had been a relatively good year and prospects for the future look good. Though the greatest concentration of Shorthorns is still in the Sherbrooke area, there are representatives of the breed in almost every county of the province, and judging from sales made by members during the past year there must be at least 40 farmers who started with Shorthorns during 1956. The Club increased its memberships from 140 to 160, and while registrations were down to 768 from 827 the previous year, transfers came up 14%, from 653 to 747.

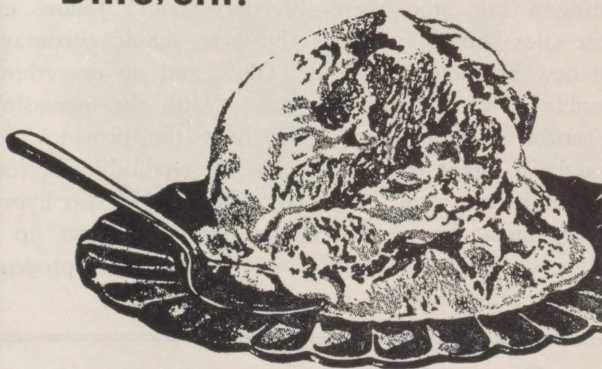
The members found that this increased interest in their breed had come about even though less field work than usual had been done by the Club as an organization, and it was evident that the breeders, convinced of the value of Shorthorns, are not backward in talking up their breed whenever the occasion presents itself.

Then, too, the presence of more and better quality Shorthorns at shows, particularly at Sherbrooke, and the several public sales that had been held at various points



This nominating committee (C. Gaulin, N. G. Bennett, Mrs. T. C. Stuart) chose a slate of officers for next year which proved very acceptable to the general meeting.

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in the Province, kept the Shorthorns in the public eye. The exhibit that was sent to the Quebec Fair, which comprised 8 head, had attracted a lot of attention, according to C. Gaulin, who had taken charge of the herd. He was convinced that this venture had proved very much worth while; visitors had been curious, had asked a lot of questions, and as a result a number of buyers had come into the Sherbrooke district, attracted by what they had seen at Quebec.

N. G. Bennet had something to say about the sales: he felt that they could be greatly improved by better organization; especially the "sale of stars" at the Sherbrooke Winter Fair, and made a plea for a consignors to send the registration papers in to the secretary early enough so that the catalogue could be prepared accurately and in time to be distributed to potential buyers well in advance. While there is a good market for quality bulls (and there are not too many available right now), there is a big demand for what might be called the "farmer's animals"; something that would sell in the \$200 to \$400 range, and he thought that there should be more of this type brought out. The average buyer these days is apparently anxious to buy as many animals as he can with the funds he wants to use, rather than use his money to purchase only one or two high quality ones.

Fieldman Ab Stoltz pleased the members by asserting that Quebec has made a bigger percentage increase in Shorthorn business than any other province; in the last two years new Shorthorn herds have been established in 27 counties, in areas where beef cattle were unknown a few years ago. And he urged the importance of not letting a sale stop there—breeders should follow up their sales hoping for repeat business, should encourage the new breeders to join the Club, and do everything possible to keep up their interest. With the increasing dispersion of Shorthorns throughout the province, he thought it might be time to consider establishing a few local clubs to cover the province better. He also hoped that it might be possible before too long to set up a testing station to evaluate economy of gain of progeny of sires—something that is really needed here.



This picture was taken early in the proceedings. There were many more present later in the day.

The members took action on one of these suggestions by asking Mrs. Stuart to organize a local club in the Laurentian area, which she agreed to do, and it is hoped that other clubs in other areas of the province can be organized soon.

C. N. Abbott was tendered congratulations for the showing his herd of D. P. Shorthorns had made at the Royal, where he took the senior and grand female championship, the junior female championship, and won the progeny of dam class.

For the third consecutive year a resolution proposed by Mr. Abbott was adopted, asking the Provincial Government to co-operate with a school or college of agriculture to organize a performance-testing unit for beef sires. The meeting also agreed that the summer field day should be held at Mrs. Stuart's farm at Arundel, on a date to be determined later.

Mr. Bennett was elected honorary president, and Hon. Patrice Tardif and Prof. L. H. Hamilton were named honorary directors. The president, Jean Godbout, continues for another year, C. N. Abbott and Mrs. W. C. Pitfield will be first and second vice-presidents, and the board of directors was re-elected en bloc.

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Some of the personalities in the Ayrshire world photographed at the meeting of the Provincial Society at Quebec in January. From left to right are Roland Pigeon, National director, Clifford Oswald, director, François Boulais, former secretary, Amédée Gagnon, past president, Mrs. Lucille Davis, incoming president, Douglas MacKechnie, National secretary, Raymond Lancot, provincial secretary, Jean Paul Lagace, director, and Deputy Minister of Agriculture René Trépanier.

Ayrshire Breeders Meet In Quebec City

For the first time since the Quebec Ayrshire Society was organized almost twenty years ago, the annual meeting was held away from Montreal. President Amedee Gagnon presided over a meeting in the Victoria Hotel in Quebec which brought out about one hundred members of the Society on January 23rd; most of the 22 local clubs which comprise the Society were represented, and there was a good representation from the breeders who live below Quebec and who seldom find it possible to make the trip to Montreal.

Secretary Lancot reported that membership in the Society now stands at 720, which is a good share of the national total of 1814. Registrations during 1956 totalled 4,207 of the 10,481 recorded for all Canada, and transfers were 2,233 out of 6,344. No fewer than 398 pure bred breeders exhibited during the year, either at local, regional or the provincial show.

He reported that a heifer sale at St. Hyacinthe had been most successful, and Quebec breeders had made a good showing with a herd that had been got together to be shown at the exhibition at Springfield, Mass.

Production certificates were distributed by the president to breeders whose cows had particularly distinguished themselves on 305 day, twice a day milking. Roland Pigeon's Glen Neil Blossom topped the list of producers, with a very close second place going to J. G. Wilson of St. Valentin. The Howick-Huntingdon club, the Ste. Anne de la Pocatiere Experiment Station, the Quebec East club, A. H. Moore & Sons of Stanstead, the St. François club, the Normandin Experiment Station and the Saguenay club all had cows with production of over 14,000 pounds of milk and 530 pounds of fat.

Minister of Agriculture Barre took the opportunity to congratulate the Ayrshire men on their capabilities as breeders, which, he claimed, has a lot to do with the healthy condition of livestock work in this province. He also made a strong plea to farmers to encourage their sons

to stay on the land and continue the good work their fathers had started.

J. R. Pelletier, the director of the Experiment Station at Ste. Anne de la Pocatiere, recently returned from a study trip to Australia and New Zealand, has worked most of his life with the Ayrshire breed, and in his talk as guest speaker at the luncheon he stressed the value of milk in human nutrition, and the value of Ayrshire milk in particular.

(please turn to page 13)



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Is Cider The Answer?

Pomologists debate the problem of surplus fruit

HOW TO KEEP poor apples off the fresh fruit market is a question that has plagued growers for years; and it is a question that becomes still more acute in years of high production such as was experienced in 1955. We have 1,000,000 trees in production now, with the prospect of another 750,000 coming into bearing within a relatively short time; we harvested 5,000,000 bushels in 1955, and although it may be a source of pride to know that Quebec will before long be the largest producing centre for apples in Canada, the problem of disposing of crops such as are in prospect is an alarming one.

Better marketing procedures that will be adhered to by every grower are musts, of course; keeping all but the top quality fruit off the fresh market, and finding other outlets for the rest of the crop, will do much to help. But one of the burning questions debated by the growers at the annual winter meeting of the Quebec Promological Society last month was—what to do with the surplus?

There are a number of possible outlets for low-grade fruit, but those that exist at the present time cannot handle the volume of a large crop. For example, out of the 5,000,000 bushels crop in 1955, processing plants used only 500,000 bushels of the 1,875,000 bushels that it is estimated graded as windfalls, culls, and "C" grade. Of this juice amounted to 46.5%, apple sauce 13.5%, pulp 29% and dried concentrate 11%; all products that are sold in competition with similar products from elsewhere. The answer, in the view of many members, is to turn the surplus into cider.

This is not a new idea, and resolutions asking for the legalization of the sale of apple cider in Quebec have been passed at the annual meeting and forwarded to Quebec before this, without effect. This year, president Hudon went over the steps which have been taken lately to study the whole question. A committee, on which the Pomological Society had been represented, had studied in detail the standards for apple cider which have been set up by various governments; taxes assessed against cider had been examined and all possible information on the subject had been obtained. As a result, the committee had recommended (a) it was in favour of the legalization of apple cider and apple wine of a type that would be accepted by consumers; (b) there should be no monopoly on the manufacture and sale of these products; (c) taxes and other duties should be paid; (d) the quality of the product should be strictly controlled; (e) a proper distribution system should be adopted.



Chairman of the resolutions committee, Bernard Lanctot, president Marc Hudon and secretary Jacques Berthiaume pay close attention as a resolution is debated from the floor.

With this explained to them, the members launched into a vigorous debate on the matter. There was no doubt but that a prosperous, legal, cider industry in the province would provide a good market for apples for which there seems to be no other outlet; and it was suggested that these might bring as much as \$1.00 a bushel. There was some discussion as to just what kind of cider would be acceptable to the public—what the alcoholic content should be—the outlets through which it could be sold—the price which could be charged etc. In the end it was decided to set up another committee to continue to work on the problem.

Later in the programme Minister of Agriculture Barre had a chance to explain his point of view, which has not changed since the subject first came into prominence. He still does not feel that, even if the sale of cider were a good thing, that we could put a uniform product on the market, and pointed out that the interest in the Department he heads has been shown by the fact that it has underwritten research at the Abbotsford co-operative by supporting studies made there, and where a 6% cider can be turned out. Would a cider of this type be popular with consumers? But even more important, to his mind, is the fact that the legalization of the sale of cider especially of high alcohol content, would mean just one more source of intoxicating beverages in this province; and this he feels would be a great mistake. He has seen so much of the evils of over-indulgence that he would be very loth to support any project that might be detrimental to many citizens. And so the matter rests at the moment.

Other subjects of interest to apple growers formed the basis of resolutions. One, adopted at the previous meetings and re-introduced, asked that a qualified observer be stationed in the Franklin, Havelock, Hemmingford district from May to September to check the orchards constantly for any signs of outbreaks of insect pests. Since the Gordon Commission had given little attention to Horticulture, the Canadian Horticultural Council was asked to make a study of the industry and, if it thinks it advisable, to ask the Federal Government to appoint a Commission to investigate the whole industry and make recommendations for its protection.

It was also suggested that the Minister of National Revenue be asked to revise the mode of taxation of sparkling wines, and that apple cider be placed in a special category.

The question of advertising is still an active one, though previous campaigns have suffered from lack of financial backing. It was decided to hold a referendum to see if growers would agree to compulsory contributions for advertising, provided the funds so obtained were administered by a representative committee of the industry.

Marketing Act Explained



Judge George Heon, Chairman of Quebec's relatively new Marketing Board, was the guest speaker at the banquet which taxed the accommodation of the Mount Royal Hotel ballroom. As chairman of the Heon Commission which had made a study of conditions in the province, which had led to the setting

up of the Marketing Board, he had investigated the apple growing industry, as part of the Commission's duties, and as a result felt he must pay a special tribute to the capabilities of apple growers. In the growing of apples they had few equals; but their marketing practices could be improved upon. Good containers, good grading, better regulation of the activities of peddlers and the determination of the growers not to try to market what he called "trash" were all things that must be achieved. As he said, it is better to pay a bit more for a good box and keep a good customer.

The Marketing Board will help to find new markets, help put goods on the market, help in every way possible, but as Judge Heon says, marketing is not the task of the Government; the Government should step in only if and when some part of the population is being exploited.

A number of technical papers and discussions of techniques were on the programme, and a large number of members followed the proceedings closely. Since these are of particular interest to growers and will be printed in full in the annual report of the Society, no attempt to summarize them will be made here. Marc Hudon and W. H. B. Marshall discussed the present and the future of the apple industry in Quebec. Apple varieties were dealt with by Don Blair, and W. R. Phillips discussed the effect of rough handling of apples at picking and in the storage plant on the keeping quality. J. J. Dempster, manager of the Farnham co-operative, talked on grading and packing and marketing was the topic of the talk by L. F. Burrows, secretary of the Canadian Horticultural Council.

French-language versions of the talks were given by Jean Beauregard, P. O. Roy, Noel Dore and Lucien Laporte, Dr. Jean David and Andre Jobin.

AYRSHIRES ...

(continued from page 11)

Under the heading of general business, it was decided that the handbook which had been published in 1934, containing the regulations concerning registration, average production for the breed, etc. should be revised and brought up to date. It was also resolved to ask that a second classifier be engaged, who would be a French-speaking resident of the Quebec City area, who would have special responsibility for classifying herds around the city and in the Lower St. Lawrence districts.

Elections brought Mrs. Lucille Davis of Fulford into the presidency for 1957, with J. P. Lagace of St. Hyacinthe vice-president. Secretary Raymond Lanctot and Messrs Roland Pigeon, Amedee Gagnon and Clifford Oswald make up the rest of the executive.



Roland Pigeon receives from Pierre Labrecque, Director of the Animal Husbandry Service, the trophy for highest production recorded in Quebec during 1956.

Agronomes Study Their Techniques

The members of the Department's Extension Service, headed by J. Ernest Dube, have been taking advantage of the winter lull to meet to discuss among themselves how they can improve their service to Quebec's farmers. Those of the Montreal and of the St. Hyacinthe area held two-day meetings during January, and other meetings will have been held elsewhere in the province by the time this issue appears in print.

The general idea of these meetings, as Mr. Dube explains it, is to make a study of the problems which farmers are facing, see how the work the agronome is doing helps to solve these problems, and to make suggestions as to how the extension work can be directed and carried out to meet the general and special needs of farmers in each area.

At the St. Hyacinthe meeting considerable stress was placed on general organization of the farms as practised by the local farmers, with suggestions for improvement that could and should be made by the agronomes; and there was discussion about the role of processors, and how marketing and credit arrangements should be organized to benefit the farmers most. Charts were used to show that increased efficiency comes with increase in size of farms.

The vexing question of seasonal production of milk came in for a lot of discussion and it was agreed that if the volume of winter milk could be increased, processing plants would work at much higher efficiency and at lower unit cost throughout the year, since they would be operating at a constant volume, and would be able to retain the services of trained workers twelve months in the year.

Vegetable production is tending more and more toward concentration into producers' units, equipped to grade and pack their own products, with the result that the market gets better products with regular delivery.

All the agronomes agreed that the farming contest, now operating on five-year plans, is an excellent way to persuade and show farmers how to improve their methods, and the only criticism was that a contest should last ten years instead of five. Work with the 4-H Clubs, now under the direction of J. E. Audet, was praised, and it was hoped here again that the work would be expanded considerably in the future.

Much the same sort of programme came out of the Montreal meetings, with differences in details.

Barley Yields Highest Ever

Olivier St. Pierre of St. Thomas d'Aquin, who won top honours in the 1956 Barley Contest, racked up quite a record. His yield was 58.3 bushels to the acre; he placed second when the crops were inspected in the field during the summer; and won both the regional and provincial contests, to collect \$490 out of a possible \$500 in prize money.

The 1956 contest was open to growers of barley in the counties of Bagot, Beauharnois, Brome, Chambly, Chateauguay, Compton, Drummond, Huntingdon, Iperville, Laprairie, Missisquoi, Napierville, Richelieu, Richmond, Rouville, St. Jean, St. Hyacinthe, Shefford, Sherbrooke, Stanstead, Vercheres, Yamaska, and because the territory covered is so large, the contest was run in two sections. The contest started last spring with 121 farmers taking part, but 45 of these were eliminated during the course of the summer for various reasons. In the fall, another 33 were dropped from further participation because the quality of their harvested crop was not up to the high standard demanded, which left 43 samples of malting barley to undergo a rigorous inspection for the final judging.

In spite of late seeding and none too good weather during the growing season, the 1956 crop was the finest harvested since these contests started. 81.4% of the samples graded No. 1, which is 11% better than the average of the past 10 years. Over half the No. 1 samples had completely

clear sheets—no faults—and their percentage of germination was high at 96.3%. Yield per acre on the average was 54.7 bushels, 3 bushels higher than the best of any previous year.

In second place in the provincial contest was Alpherie Beaulieu of St. Martine; third, P. E. Cote, St. Thomas d'Aquin; fourth Roger Roy, l'Acadie.



Top winners in the 1956 Barley Contest. From left to right, Olivier St. Pierre, Alpherie Beaulieu, D. M. Chenoweth, President, Quebec Brewers' Association, who presented the prizes, Paul Emile Cote and Roger Roy.

Dear Readers:

Are you getting soil ready for early planting, or, better still, building a small greenhouse? Not many of us have reached that stage yet, I'm afraid. A recommended soil mixture is three parts sand, two parts soil, two parts peat moss and one part well rotted manure. I used to have trouble with the weeds coming up before the seeds germinated and had some damping off to contend with until I started to bake the earth to sterilize it. One day I cooked it too much and had no sign of life, so had to get in more earth, add it to the flats and replant them. So now I put an apple or a potato in the soil and when it is partly cooked I remove the earth. An easier way is to pour boiling water over the soil, but this makes it harder to plant in it afterward.

Seeds to make plants for the family garden which should be sown early are celery, peppers and tomatoes. These germinate best in a warm place, and need to be gradually brought into sunlight as soon as they have sprouted. If left longer they will be too stringy and yellow; but if placed directly into strong sunlight it may cook and wilt them.

What are your plans for beautifying your surroundings this coming summer? I've heard of some American villages which transform their whole town by using window boxes to such an extent that they are spot-lit and are attractions for tourists.

In dark corners or if the home has

*It's Results
that Count!*



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a northern exposure, the boxes could be planted with begonias. I saw some beautiful displays of red and yellow flowers last summer. I had quite a time to get mine to come up as I had planted them upside down. I now know that the hollow in the bulb is at the top. I had to be careful in watering the ones I replanted not to get water near the bulb as it will settle in the hollow and rot the bulb. Water may spot or sunburn the leaves, too. Pansies will also do well in these darker positions and will bloom profusely for many months if well watered and not allowed to form seed pods. This seems to take the strength from the stems.

Petunias, double, single, ruffled, hybrid or balcony, bloom continuously in warm sunny positions. They are available in a wide range of brilliant colours as well as pastels. The seeds are as fine as dust and need special care for the first three weeks. They do not need to be covered with soil, as this smothers them. Some soil can be mixed with the seeds when they are sown. A glass cover on each container holds the moisture in, but a newspaper needs to be under the glass to keep the condensed moisture from dripping and washing soil over the tiny seeds.

Trailing lobelia is suitable as a hanging plant to accompany the petunias. Coleus make a colourful background. I did use Angel's Trumpet (Datura) but find they do better in rich earth in a bed, or when they are used as hedge plants.

Let's offer the boss a flower box of his own. An end of a barrel upended, an old hog trough, or half a hot water tank placed in some convenient place where he passes several times a day could be planted with his favourite flowers. Just happen to have some red geraniums rooted in case he should ask for them.

I wonder how the fruit trees are standing up to the cold weather we have had? If the pears and cherries survive this winter, our worries about them will be over. The temperature went as low as 50 below one night, but the days felt quite warm at 20 below compared to what we were accustomed to at night.

A lot of work is going on in this area to reorganize a milk producers' organization. The Farmers' Association and Farm Forum members are helping out where they can.

Sincerely,

Wally.





THE WOMEN'S INSTITUTES SECTION

*and to matters of interest to them
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TEETH

by Minnie Coupland

A tooth begins to develop early in embryonic life, by the development from the mucous membrane of the gum of a group of modified epithelial cells which dip down into the substance of the gum and form an organ, the germ of the tooth, which will furnish the enamel needed. Below that there next develops a mass of special tissue which takes the shape of the future tooth.

In form, teeth vary from a simple spine-like or conical shape, to many chisel-like or massive and complicated forms, all of which are determined in the germ, and before the tooth makes its appearance above the gum. In man two sets of teeth are developed—the early, milk, or deciduous teeth, and the permanent set. The milk or temporary teeth are gradually displaced from below by the upward growth of the permanent teeth, the fangs of the milk teeth being absorbed, and the latter falling out as their successors are more fully developed. The milk set consists of twenty teeth; four incisors, two canines, and four premolars or bicuspid in each jaw. The permanent set includes, in addition to the foregoing teeth, six true molars in each jaw. The milk teeth begin to appear about the sixth month of life, and continue to be developed till about the end of the second year. The permanent teeth begin to appear about the sixth year of life, the first being the front molar of each side, while the last molars or wisdom teeth are not usually developed until adult life has been attained. Thus the permanent set has thirty-two teeth—sixteen in each jaw.

Decay (caries) is by far the most common of the diseases which affect the teeth, and consists in a gradual and progressive disintegration of the tooth substance. Decay is rarely met with on smooth surfaces exposed to the friction of food and the direct washings of the saliva. It usually begins in some pit or groove in the enamel or between the teeth, such points forming a lodgment for the development of the organisms. Once the enamel has been penetrated the decay proceeds more rapidly, spreading laterally beneath the as yet, healthy enamel and toward the pulp. The more dense the structure of the tooth the more directly does the decay penetrate in the direction of the pulp, though its process is not so rapid and its tendency to spread is less. The treatment of caries can only be undertaken by a dentist and varies with the extent and character of the disease.

It is not uncommon to find certain of the temporary teeth firmly set in the adult jaw, and occupying the place of the permanent ones. In such cases the permanent tooth is usually present in the body of the jaw, but it has been retarded in eruption by being too deeply embedded in the bone. Impaction may also be due to abnormal direction of growth. Such teeth may appear late in life after all others are lost, and the bone overlying them has been absorbed and so exposed them. When these cases do occur they are responsible for the popular but incorrect idea of a third set of teeth. An impacted tooth seldom gives rise to any trouble, unless it be an upper or lower wisdom, particularly the latter. The cutting of these teeth is sometimes accompanied by distressing symptoms, which may be protracted for months or years, unless they are removed by extraction of the tooth. The condition is usually due to imperfect development of the jaw.

An aching tooth is a symptom of disease which requires immediate attention. When due to decay with or without simple exposure of the pulp, the attack is brought on by taking hot or cold liquids, and is seldom of long duration. When the pain is caused by an abscess the tooth will be found insensitive to change of temperature, but very susceptible to pressure. The person becomes feverish, and the pain, which is at first of a dull heavy character, becomes more intense, throbbing, and continues, till pus has been formed and discharged through the gum. In the case of an abscess, poultices should never be applied to the face, for heat tends to drain the pus outward.

Many of the diseases of the teeth and gums might be prevented or greatly retarded by proper attention to the cleansing of these organs. The implements best fitted for this purpose comprise the toothpick, dental floss, and toothbrushes with suitable paste or powders. The toothpick ought to be used after every meal. It should be supplemented by the use, between the teeth, of dental floss, which will remove deposits accumulating where contiguous teeth touch. The brush is used to remove all deposits solid and mucous, and it gives the teeth a bright and polished appearance; its mechanical friction, too, stimulates the gums to more healthful action. The teeth should be brushed twice daily, in the morning and in the evening, and last but not least, see your dentist twice a year, especially should this be attended to in children.

The Month With The W.I.

Ten more branches have completed, or are completing, uniforms for the W. V. S.; over \$100 was sent during the month to the Foundation Fund; well over \$50 was sent to the Service Fund; collections made for the Institute of the Blind; donations to Hungarian Relief, Children's Hospital; prizes to schools; gifts to the needy, etc.,—one can really see by these reports that the Institute members are not sitting back and watching others.

Argenteuil: Arundel members were entertained by the executive with a Christmas Party. Gifts were distributed. Brownsburg are busy making uniforms; they entertained the school teachers, the executive of the Home and School and members of the School Board; flowers and bulbs were planted around the Cenotaph and a wreath placed on Remembrance Day; donated books to the school library and awarded prizes at the school opening. \$7.60 was sent to the Foundation Fund. *Frontier* held a discussion on the origin of Christmas Cards; had a Christmas Quiz, sold poppies and UNICEF cards; had an auction of small articles; heard an interesting review of a book written by Mrs. Roy Rogers re her retarded child; heard a medical article re "effects of parental illness on unborn children"; gave a donation to the retarded Children's Home in memory of a deceased member (Five Dollars). *Jerusalem-Bethany* sent gifts to the needy and cards and fruit to shut-in friends. They had a paper on Education and enjoyed several contests. *Lachute* heard a talk on "Ireland" by Rev. J. Armour; one on "Cooking on the Run" by Madam Jehane Benoit and a paper on "Christmas Customs in other Lands." Their project was to bring gifts for hamper to send to needy families. *Lakefield* presented a gift to Mrs. R. Evans; had an exchange of gifts and the usual Christmas meeting. *Mille Isles* made \$10 from the sale of Christmas Cards; sent five Dollars to the Foundation Fund; sent \$10 to *Care* of Canada and \$10 to the Hungarian Relief Fund; had an exchange of gifts and sent greetings to the sick and shut-ins. Mrs. G. Riddell won the knitted afghan made by members. *Morin Heights* held a Christmas party where they played games, sang carols and entertained many guests. They heard talk on "Fluoridation" at their January meeting. *Pioneer* had a Christmas Party with gifts, readings, singing and contests; had a small food sale; sent Five Dollars to *Care* and \$10 to the Montreal Children's Hospital. Christmas Cards were sent and a gift was given. *Upper Lachute-East End* had a discussion on "Taking of a Handicraft Course"; sent Christmas Cards to former members and a box to a family; donated \$25 to School for Retarded Children, \$15 to Children's Hospital, and \$10 to buy leather to help a handicapped boy continue with work he has been learning.

Bonaventure: *Black Cape's* roll call was "Christmas customs in other Lands;" gifts were exchanged; boxes packed for local families; carols were sung and films shown. *Grand Cascapedia* held a Christmas Party with



This picture was taken during the Christmas meeting of the Minton Branch, held at the home of Mrs. Kenneth Dean.

exchange of gifts. Greetings were sent to shut-ins. This branch paid one cent per inch of bust measure as roll call. A box of groceries was sent to a needy family. Decision reached to sponsor a Brenda York Cooking School. *Marcil* sent gifts to all needy children in the district; received \$35.10 from the Campbellton Graphic for items submitted; sent \$20 to the National Foundation Fund and \$25 toward hot school lunches. *Matapedia* reports the commencement of "Operation Snowball" (an article wrapped like a snowball was given to Mrs. F. Fitzgerald by Mrs. W. Adams. It will be passed among the members with each one adding to the snowball, all winter. A "thawing out" party is planned for the spring). A successful card party was held. *Port Daniel* sold articles suitable for gifts; heard an address on "Folklore of Canada" by Mrs. Dow; sent cards to shut-ins; netted \$30.15 from a card party; sold two mystery parcels netting \$4.75. *Restigouche* sent \$10 to the Service Fund, \$10 to Foundation Fund, realized \$10.45 at a social evening; gave a Christmas treat to children and shut-ins; and had a quiz on Citizenship. (This branch has lost two valuable members, Mrs. R. Nicol and Mrs. F. Ryan, who have moved to other provinces).

Brome: *Abercorn* sent one dollar per member to the

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MORE
MILK!**

... through
balanced feeding

"MIRACLE"

DAIRY FEEDS

217-54

Service Fund; sent \$10 to Flambeau Home and sold tickets on a drawing. *Austin* held a Bring and Buy sale and collected spectacles to be sent to I.O.D.E. in B.C. *Knowlton's Landing* held Children's Party and sent diapers to Cecil Memorial Home. *Sutton* held auction of Mystery Parcels, donated book to school library; handed in 41 pairs socks, 6 large quilt tops, and one crib quilt for the Red Cross. Two parcels were received (from *Eaton's* and *Simpson's*).

Compton: *Bury* heard an interesting talk on "Citizenship" by Col. Wood; collected \$60.75 for the Blind Campaign; received notes of thanks from sick and shut-ins who had received Boxes at Christmas. A birthday cake and gifts were taken to Mrs. L. D. MacLeod following the meeting. *Canterbury* held discussions on "Bursary Fund" and "Cookshire Fair Exhibit;" demonstration enjoyed on home-made decorations; sold cards to raise the five dollars donated to the Foundation Fund; had a sale of fancy work and home made bread; sick and shut-ins remembered at Christmas; box of clothing sent to Cecil Mem. Home; and box of gifts sent to Military Hosp., *Cookshire* ladies exchanged recipes; started a card marathon; remnants brought in to be sewn for sale; five squares handed in; \$27.30 made on "Round Robin", and Mrs. R. Learned demonstrated decorating a cake with flowers. *East Angus* held a Christmas party at meeting with gift exchange and entertainment of school teachers. \$25 was donated to Christmas Cheer. *Scotstown's* (sixteen) members who were present brought in Gifts for the Wales Home. \$41.85 made from paper drive. Box of clothing sent to Cecil Memorial Home. Mrs. K. R. MacLeod gave a radio broadcast over CKTS in Sherbrooke.

Gaspe: *Wakeham* realized \$35 from a Military Whist Card Party. Their Roll call: A New Year's Resolution. *York* welcomed two new members. UNESCO Christmas cards were bought by some of the members; Cards and parcels were sent to sick and shut-ins; a party was sponsored for children; Roll call: A gift for a child at the Sanitarium.

Gatineau: *Aylmer East* presented life Memberships to four Charter members; children entertained by singing carols and received gifts and candy; members had gift exchange and contest; donated \$10 to Institute of the Blind. *Breckenridge* had a discussion on "Raising funds for Teacher Loan"; hints were given on Cleaning aluminum; Quizzes were: "Parody on Names", "Canada" and "Canadian Fishing Industry". *Eardley* heard a reading "Of Many Things", a paper on Miracle Drugs, report of Semi-annual meeting; contests: "Parts of the Body" and "An article made from a plain or flowered bag" (later sold). Uniforms are being made. Discussion was held on "County Loan Fund", and donated \$10 to Institute of the Blind. In December a social evening was held with Carols and gifts. *Lakeview* discussed School Fair and Christmas Dance and donated \$10 to Foundation Fund. This branch sponsors the South Hull Juniors who are doing fine work. *Lower Eardley* held a debate on You

and Your Community; prizes awarded at Aylmer High School; social evening held at Christmas time; Clothing and a Christmas treat sent to Brookdale Farm. Three interesting contests were held. *Rupert* distributed knitting and sewing for Save the Children; a box of prunes was sent to the Brookdale Home and to the Gatineau Memorial Hospital; gifts sent to shut-ins for Christmas. *Wakefield* had as guest, Mrs. H. Ellard, with her topic "National Office at Ottawa"; heard report of Semi-annual meeting; held social evening in December; provided screens for every ward in the Gatineau Memorial Hospital at a cost of \$540; collected \$173 for the Institute of the Blind; Sold poppies for the legion; sent \$10 to Veterans at St. Anne's Military Hosp.; a group of girls collected over \$25 at Hallowe'en for UNICEF. A contest was held on "Know Your Canada". At the January Meeting Dr. Harold Geggie spoke on Health and Welfare. *Wright* had Mr. J. Gordon as guest speaker. Topic: Citizenship, with a film. Members conducted the Poppy sale and netted \$103 for the Legion. \$10.25 was donated to the Service Fund. Subscription to the Consumers Guide was renewed. A reading, "How serious is the Threat of Radiation". *Wright* sponsored the Annual Carol Singing on December 21 when about 40 attended.

Jacques Cartier: *Ste. Anne de Bellevue* had discussions on "Show Mart" and the "Semi-annual meeting of the Q.W.I."; a white elephant sale and a drawing was held; a hamper of warm clothing was collected for the Hungarian Relief. The 8 lessons in ceramics were completed. Uniforms are being made. Donation made to member's husbands who are ill (cigarettes). Food basket for needy family. Clothing, etc. for Cecil Memorial Home.

Missisquoi: *Stanbridge East* enjoyed a talk by the Q.W.I. President, Mrs. Harvey, on her trip to Scotland and of a meeting she attended in London. Pictures of people she had met and places she had seen were shown to the group. A discussion was held on a "Fitting Way of celebrating the 60th anniversary of W.I. in Feb." \$16 was awarded in school prizes and \$10 was voted to Hot Lunch Program.

Montcalm: *Rawdon* made plans to hold a series of card parties and a food sale; food parcels were sent to three needy families at the Holiday season; the education convenor, Mrs. D. Kyte, gave an interesting talk on "Health Habits and Learning"; the Dental Project is being re-organized to help as many needy children as possible. This branch held an annual dinner and a card party.

Papineau: *Lochaber* had a contest on "Most originally wrapped gift"; sent gifts to Senior members and shut-ins; sent cards to all former members; exchanged gifts among members; held bazaar and cooking sale; and sent \$15 to the Foundation Fund.

Pontiac: *Bristol* heard a Christmas story and had a Christmas contest and exchange of gifts. *Clarendon* answered the Roll Call with a shower of gifts for needy persons; had a sing-song and exchanged gifts. *Elmside*

held a Christmas party with gift exchange, Carol Singing and heard a Christmas story. *Quyon* heard readings, had Carol Singing; sent flowers to a shut-in and canvassed for C.N.I.B. netting over \$160. *Shawville* held a Christmas party with donations of gifts for needy persons, also had a gift exchange. An old hat contest was won by a person wearing a hat that was 65 years old. *Starks Corners* had an exchange of gifts and roll call was answered by a gift to the hospital. Donations of five dollars each were sent to C.N.I.B. and Anti T.B. Society. *Wyman* are sponsoring a skating rink.

Quebec: *Valcartier* donated \$25 to an invalid and \$50 to the Cancer Fund.

Rouville: *Abbotsford* heard an instructive talk on the culture of small fruit by Mr. C. E. St. Marie, B. S. A. of l'Assumption Experimental Station. This was followed by discussion.

Richmond: *Cleveland* sent Christmas cheer boxes to shut-ins. *Gore* had a short study of a section of the hand book and discussion of same and held a white elephant sale. *Melbourne Ridge* are sewing on ten uniforms. The W. and H. convenor reported a good supply of linen and \$10 on hand for the Cancer Society. An 80 lb. bale of clothing for Save the Children Fund and a 20 lb. bale of clothing for Cecil Memorial Home was sent. Two boxes of goodies sent to a needy couple and a plant and bed jacket sent to member in hospital. *Richmond Hill* sent a donation to the Cecil Memorial Home and a parcel of cotton to the Cancer Society. *Windsor* is busy with uniforms; donated a book to the Windsor school; held a bingo party with proceeds to go to National Foundation Fund; gave five dollars to the Brownies; and sent a donation to the Cecil Memorial Home.

Shefford: *Granby Hill* heard report on Christmas party held in High School; Two contests; uniforms are being made; donations made to "The Friendly Home" and "Children's Hospital". Money was given for a box to be sent to an old lady in the Home. *Granby West* held two contests (on a turkey and Countries and Nations). A donation of a crate of oranges sent to an orphanage. *South Roxton* held a turkey supper at Christmas for members and their families. The meeting was held in the Christmas manner with readings and exchange of gifts. Paper was read on "Fad Diets". \$3.20 was sent to the Foundation Fund. *Waterloo-Warden* answered the roll call by a donation to an orphan's home and an exchange of Christmas gifts. Uniforms were completed. Guest speaker, Miss Miller, district nurse. A paper was read on CAC Plans made to celebrate 30 anniversary of branch.

Sherbrooke: *Ascot* enjoyed a Christmas Program with readings and gift exchange; five dollars was donated to buy gifts for Cancer patients; \$15 used for baskets for aged and shut-ins; several members bought UNICEF greeting cards. *Belvidere* donated \$20 to the Foundation Fund; held a food sale; cotton donated to cancer society; uniforms distributed for sewing; a penny sale was held and Christmas gifts exchanged. *Brompton Road* sent



Some of the Austin W. I. members enjoying the tea which marked the closing of the jewellery-making course which was held under the guidance of Miss Betty Altimas.

monthly parcel to War Veteran; \$25 voted to Service Fund; \$25 to Foundation Fund; \$10 to Community Christmas Tree; Crate of oranges sent to Wales Home; Six dollars was voted for gifts to Immigrants in Community; held a successful card party and sale in Community Hall; gifts were exchanged among members. *Lennoxville* made a donation to the Service Fund; held a contest for the most originally wrapped gift; 46 knitted squares were completed; gift exchange was held. A letter was read from a member of Cooma, Australia, (this was arranged through Exchange Program). *Milby* sent one dollar per member to the Q.W.I. Service Fund; hot lunches are being provided for a child at the Lennoxville High School.

Stanstead: *Ayer's Cliff* heard an address by Mrs. M. Austin, a commercial artist, on her work as designer of Christmas Cards, background staging at North Hatley Summer theater and art work in general. A message of the season was read to the members from Lady Nuthall. Milk is to be supplied to a needy family for winter months. Christmas cheer sent to four families. Donation was sent to UNICEF. *Beebe* donated \$25 toward the hot lunch program at the school; sent eight boxes of cheer; donated 12 books as school prizes; and enjoyed the cake decorating done at meeting by Mrs. J. Silvester. *Hatley Centre* heard the five W's of Publicity by Mrs. Mappin. Plans made for a card party. *Minton* had Mrs. Grace LeBaron as guest speaker on Health. Round Robin passed at both Dec. and Jan. Meetings. A sunshine basket given to a member at Christmas. Gift exchange and tree at meeting. Cancer dressings made. Two dollars given for Sunshine. *North Hatley* program was in charge of Citizenship and the roll call was to name a member of the United Nations. Program took form of quiz on United Nations. Each member is to donate two garments fit for immediate use for Hungarian Relief. *Stanstead North* had Mrs. E. R. Embury as guest when she gave a paper on Citizenship. Nine prizes awarded for Citizenship in Sunnyside school, *Way's Mills* had a Singer Sewing Machine demonstration; donated \$10 to Hungarian Relief and sent eight boxes of cheer. Roll Call: How I should participate in every W. I. project.

Vaudreuil: *Cavagnal* held their annual Christmas Party in Wyman Hall when gifts were exchanged and ties were donated for the Vets. at Ste Annes Military Hospital. Tea was served.



THE COLLEGE PAGE

The Macdonald Clan

Notes and News of Staff Members and Former Students

Farm Course For April

The staff of Macdonald College, and the agronomes of the staff of the Department of Agriculture's Extension Service, are all enthusiastic about the College's latest project—a revival of the short courses in agriculture which were an important part of the College's services to the rural public some years ago. Representatives of the two groups met early in December to talk about the plan and to make suggestions as to how it should be carried out to be of the most value to the greatest number of people.

The short course is not a new venture for the College. From the very first, members of the staff organized and gave courses for students, old and young, who were not registered for full-time study at the College. Some of the courses were given here, some in the country; they varied in length from a few days to a fortnight. As a matter of fact, for two consecutive years the College ran a special demonstration train into the country, equipped with exhibits of livestock, grain, machinery, etc. and with living and sleeping quarters for the staff members who accompanied it and did the instructing in the towns at which the train stopped.

No record of attendance at these courses was kept in the early days, but they continued, with some interruptions, until the winter of 1939-40; with only 5 students that year, the short course was abandoned, and nothing more was done about this kind of instruction until almost 10 years later.

In 1947 the Adult Education Service organized the first of its Christmas Short Courses at the College. These were different from what we had been used to in the past; they were courses designed to give training in community leadership, and emphasized the planning and conducting of group meetings, recreation, etc. Similar courses were also given in the country, and one winter no fewer than five such courses were underway at five localities. Attendance at the College course (held between Christmas and New Year's) began to drop off a few years ago, however, and no course has been given since Christmas week in 1954.

Although the short courses in farming ceased in 1939, after the war the College cooperated with the provincial government in offering courses in cooperation, which attracted a large number of students, and the Agricultural Engineering Department for some years put on special courses in mechanics for veterans, the idea being to train them for positions as repairmen in rural district garages and machine shops.

As we write this, complete details of the new course are still not all settled. But the main topics for discussion will be livestock care, economics, farm management and farm organizations. Many other less general topics were suggested by the agronomes, and these will be worked into later courses.

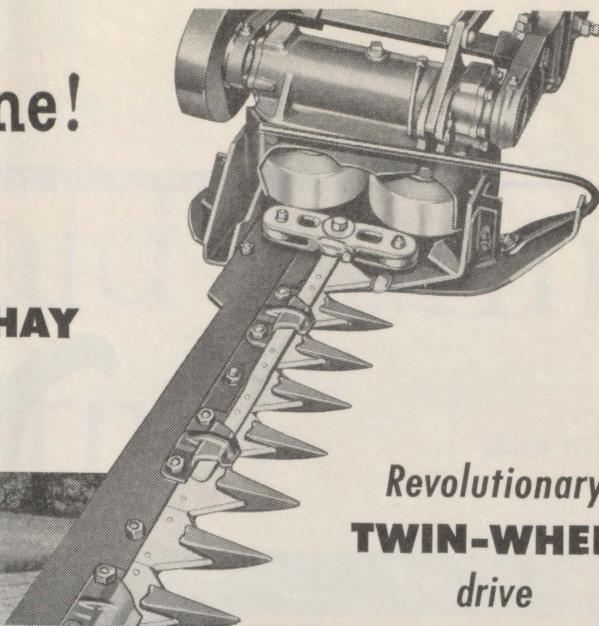
For the first year, to get the programme underway, the agronomes will be the "students" on whom the new arrangements will be tried, on an experimental basis. The group will be kept to a relatively small number, and this year's experience will be a basis on which later courses will be planned. While the agronomes, around whom this short course is being built, are given the opportunity of bringing with them one or two farmers from their counties to take part in the course, no general announcement or invitation is being made for this year. Future courses will certainly be open to larger numbers, and will be directed toward the needs of the progressive farmers of the province.

The success of the last Macdonald College Farm Day, when a special programme was organized for those of the French language, prompted some of the agronomes to ask if there was any intention of putting this new course on in the French language also. It was not thought possible to hold two courses simultaneously in both languages; but if there is a request for this kind of help from those of the French language who cannot profit from courses in English, the College will gladly offer this help.

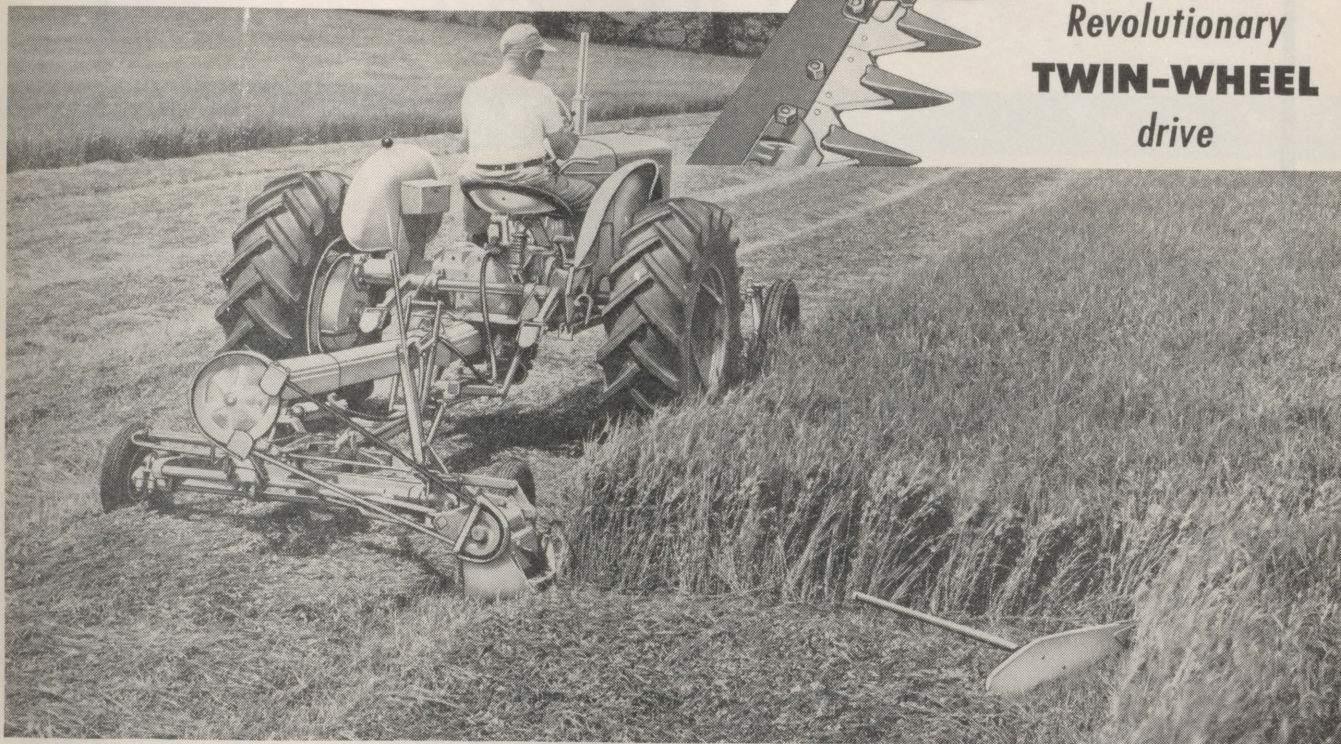
The course will be held in the early part of April, and it is quite likely that short, one or two day courses will be made available throughout the country districts during the summer months.

Sickle Chatter-Gone!

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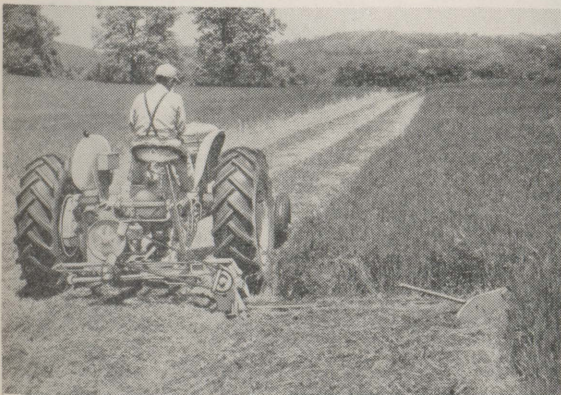


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